REMARKS

In response to the Final Office Action of October 8, 2003, Applicants have carefully considered the rejections of the Examiner in the above-identified application. In light of this consideration, Applicants believe that the claims as now amended, are allowable. Applicants respectfully request reconsideration of the rejection of the claims now pending in the application.

In the first Office Action of February 28, 2002, claims 1-7 where rejected under 35 U.S.C. §101 as not being within the statutory classes. Claims 1-4, 8, 9, 13-15, and 19-20 where rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,038,039 to Zeng (hereinafter Zeng). Claims 5-7, 10-12, and 16-18 where rejected under 35 U.S.C. §103(a) as being unpatentable over Zeng in view of U.S. Patent No. 5,459,828, to Zack et al. (hereinafter Zack).

In the second Office Action of August 27, 2002, claims 1-4, 8, 9, 13-15, and 19-20 where rejected under 35 U.S.C. §102(e) as being anticipated by Zeng. Claims 5-7, 10-12, and 16-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zeng in view of Zack.

In the third Office Action of October 25, 2002, claims 1-4, 8, 9, 13-15, and 19-20 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,706,046 to Eki et al. (hereinafter Eki). Claims 5-7, 10-12, and 16-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Eki in view of Zack.

In the forth Office Action of April 14, 2003, claims 1-4, 8, 9, 13-15, and 19-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Eki in view of U.S. Patent 6,177,948 to Estabrooks et al. (hereinafter Estabrooks).

Claims 5-7, 10-12, and 16-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Eki in view of Estabrooks and further in view of Zack.

In this fifth Office Action of October 8, 2003, claims 1-4, 8, 9, 13-15, and 19-20 are again rejected under 35 U.S.C. §103(a) as being unpatentable over Eki in view of Estabrooks. Claims 5-7, 10-12, and 16-18 also stand rejected again under 35 U.S.C. §103(a) as being unpatentable over Eki in view of Estabrooks and further in view of Zack.

Claims 2 and 3 have been canceled. Claims 1, 8, 13, 19, and 20 have been amended.

Claims 1-4, 8, 9, 13-15, and 19-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Eki in view of Estabrooks. Eki provides an image forming apparatus including a bit map data generating section for generating binary dot data for each color from image data, an image memory for storing the dot data, an edge dot discriminating section for discriminating edge dots positioned in an edge section, such as a curved-line section, a slanted-line section of characters, graphics, photo images, etc. in dot data for black stored in the image memory, and a dot modulating circuit for modulating the dot data so that the edge dots and printing dots other than black ones become smaller than black printing dots other than the edge dots. With this arrangement, since linear tone can be obtained even in a section with a deep color, excellent tone can be obtained in multi-color printing such as full-color printing. Therefore, reproducibility of tone of binarized image data can be improved, and jaggedness in an edge section can be improved so as to have a smooth line.

As acknowledged by the Examiner in the present office action nowhere in Eki is there mention or teaching of auxiliary pixels, either by name or by functional equivalence. Auxiliary pixels are thoroughly explained in the applicant's specification. They are non-printing in effect pixels which never-the-less have a printing effect upon the original pixels which they neighbor, as will be well understood by one skilled in the art in view of the application. Please see pages 8-10 starting with lines 22-35, on page 8, and ending at line 5 of page 10.

Estabrooks provides an electrophotographic apparatus and method to reduce smearing on printed medium by reducing the toner pile height of printed lines and characters. Control is provided for establishing the amount of toner to be applied on a picture element (PEL) basis. This is accomplished by the creation of mask patterns that distinguish characters and lines from large patches to be printed, and by identifying PELs internal of characters boundary requiring exposure modulation during printing.

Estabrooks teaches away from the Applicants' invention. Estabrooks is directed to excess toner pile height and the resultant toner smear caused thereby, when sheets are slid by each other for stacking. Thus Estabrooks is directed to determination of interior pixels (where the piles get highest) and excludes the "non-edge PEL", please see column 2, lines 45-48 of Estabrooks. Further, Estrabrooks goes on to state, "the edge PELs have the same toner pile height" at column 6, lines 30-31 after application of Estabrooks invention. Thus Estabrooks ignores and entirely fails to address the problem to which the Applicants' invention is directed, namely lead edge deletion where the leading edge and fine line and details are starved of toner, see page 1, lines 19-23, page 2 lines 1-18 and page 7, lines 20-23 of the Applicants' specification, sometimes even to the point of no development particularly as

system throughput speeds are increased. The Applicants' invention is particularly focused on getting out in front of the leading edge, outside the character to start encouraging the toner cloud closer so as to insure proper toner accumulation. Simply put, Estabrooks invention is directed to smearing and the Applicants' invention to development.

As Eki fails to teach the Applicants' invention, and Estabrooks teaches away from the Applicants' invention, it is not possible that anyone skilled in the art could combine then and thus find the Applicants' teaching or claims obvious. The prima facie case for obviousness has not been made.

Furthermore, none of the cited references suggests or teaches the desirability of combining the elements of the present invention as claimed. Obviousness cannot be established by combining references to arrive at the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger, 2 U.S.P.Q. 2d 1276 (Fed. Cir. 1987); Carella v. Starlight Archery and Pro Line Co., 804 F.2d 135, 231 U.S.P.Q. 644 (Fed. Cir. 1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. (BNA) 929 (Fed. Cir. 1984).

The Examiner appears to have considered various portions of the references cited, in each instance viewing the cited portion in isolation from the context of the entire reference, and combined these isolated portions to arrive at the present invention with the benefit of hindsight. Using hindsight or applying the benefit of the teachings of the present application when determining obviousness, however, is impermissible; the references applied must be reviewed without hindsight, must be reviewed as a whole, and must suggest the desirability of combining the references. Lindemann

Maschinenfabrik v. American Hoist & Derrick Co., 221 U.S.P.Q. 481 (Fed. Cir. 1984).

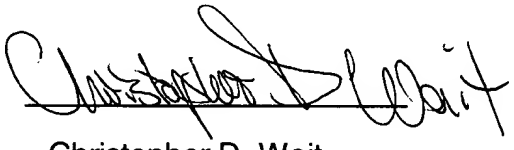
As a prima facie case for obviousness has not been successfully made, removal of the rejection of claims 1-4, 8, 9, 13-15, and 19-20 under 35 U.S.C. §103(a) is respectfully requested.

The Examiner has rejected dependent claims 5-7, 10-12, and 16-18 under 35 U.S.C. §103(a) as being unpatentable over Eki in view of a U.S. Patent to Estabrooks, in further view of a U.S. Patent to Zack. As claims 5-7, 10-12, and 16-18 depend from independent claims deemed allowable they should be allowable as well. Allowance of claims 5-7, 10-12, and 16-18 is respectfully requested.

No additional fee is believed to be required for this amendment; however, the undersigned Xerox Corporation attorney authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

It is respectfully submitted that the present set of claims are patentably distinct over the cited references. In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby requested to call the undersigned attorney at (585) 423-6918, Rochester, NY.

Respectfully submitted,



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